THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 15

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte RONALD SIEGRIST and BRUNO J. STILLHARD

Appeal No. 1998-1008
Application No. 08/574,358

ON BRIEF

Before CALVERT, McQUADE, and BAHR, Administrative Patent Judges.

CALVERT, Administrative Patent Judge.

DECISION ON APPEAL

This is an appeal from the final rejection of claims 21 to 26, all the claims remaining in the application.

The claims on appeal are drawn to an injection molding machine having a movable die section (claims 21 to 23), and a

control system for directly controlling acceleration of a pressure-driven movable die section (claims 24 to 26).

The reference applied in the final rejection is:

Sato 4,855,095

Aug. 8, 1989

Claims 21 to 26 stand finally rejected under 35 U.S.C. § 102(b) as anticipated by Sato.

We will consider separately the two groups of claims into which appellants have divided the claims on appeal.

Claims 21 to 23

Independent claim 21 requires, inter alia:

> a controller for controlling the pressure of the fluid in said fluid line, said controller including a sensor for sensing at least a portion of at least one of a time function, a velocity profile and a position profile of said movable die section at all times during movement of said movable die section between first and second positions and producing an output signal indicative thereof, wherein at said first position said movable die section is operably arranged with a second die section for formation of an injection molded product, wherein at said second position said movable die section is spaced from the second die section for molded product ejection, wherein said output signal is fed into a comparator for comparing said output signal to a control parameter, said comparator outputting a control signal to a pressure regulating device in said fluid

> line for controlling the pressure of fluid entering said port, and hence directly controlling the acceleration of said movable die section at all times during movement of said movable die section between said first and second positions.

In applying this language to the apparatus disclosed by Sato, it is evident that Sato discloses a sensor 31 which senses the position of movable die section 16 and produces an output signal fed to a comparator 33. However, claim 21 further requires that the sensor sense "at least a portion of ... a position profile of said movable die section at all times during movement of said movable die section between first and second positions" (emphasis added), the first and second positions being defined as, in essence, the closed (molding) position and the open (ejection) position of the movable die section, respectively. We find no disclosure in Sato of how the movable die is controlled during its movement from the closed position to the ejection position. Sato's description of the operation in col. 4, lines 4 to 32, states in lines 5 to 7 simply that "the metal molds are opened by moving the movable metal mold 16 to the left [in the drawing] to take out the molded product," and the remainder of the description is concerned with operation of the machine when the movable mold

is being moved in the other direction. Presumably, insofar as Sato's disclosure is concerned, the movable mold 16 would be moved to the open (ejection) position merely by applying pressure to the right side of the piston in cylinder 18, and there is no disclosure that such pressure is controlled (and certainly not controlled "at all times" as required by claim 21) in response to any signals from sensor 31. The relevance of the examiner's statement on page 4 of the answer that Sato's sensor 31 senses at least a portion of the position profile during the injection phase is not apparent, since claim 21 is concerned with the opening or ejection phase, rather than the injection phase.

Accordingly, the rejection of independent claim 21, as well as dependent claims 22 and 23, will not be sustained.

Claims 24 to 26

Insofar as relevant to this decision, independent claim 24 essentially differs from claim 21 in that it is concerned with movement of the movable die section in the opposite direction, i.e., from the second (ejection) position toward the first (closed) position. As recited in lines 9 to 16 of the claim, the system includes:

> a sensor for sensing at least a portion of at least one of a time function, a velocity profile and a position profile of the movable die section during movement of the movable die section from a second position toward a first position and producing an output signal indicative thereof, wherein at said first position the movable die section is operably arranged with a second die section for formation of a product, wherein at said second position the movable die section is spaced from the second die section a sufficient distance to allow ejection of a formed product from between the movable die section and the die section.

Appellants' argument on pages 9 and 10 of their brief seems to be predicated on the fact that Sato's detector 31 is not involved in controlling the movement of movable die section 16 during the entire movement from the second (ejection) position to the first (molding) position, but claim 24 is not so limited.

It is well settled that claims are to be given their broadest reasonable interpretations, and limitations are not to be read into them from the specification. In re Van Geuns, 988 F.2d 1181, 1184, 26 USPQ2d 1057, 1059 (Fed. Cir. 1993). Here, claim 24 expressly does not require that the sensor sense more

than "a portion" of a position profile, and (unlike claim 21) does not require that the sensing be "at all times" during movement of the movable die section; but rather, giving claim 24 its broadest reasonable interpretation, the recitation "during movement ... toward a first position" in lines 14-16 merely defines the direction in which the movable die section is moving, rather than the duration of the time period during which the sensing occurs. Claim 24 therefore reads on apparatus, such as that of Sato, where the sensor senses a position profile during part of the movement of the movable die section from the second (ejection) position toward the first (molding) position. Since Sato discloses apparatus meeting all the limitations of claim 24, that claim is anticipated.

We will therefore sustain the rejection of claim 24, together with the rejection of claims 25 and 26, which appellants have grouped with claim 24. 37 CFR 1.192 (c)(7).

Conclusion

The examiner's decision to reject claims 21 to 23 is reversed, and to reject claims 24 to 26 is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

Affirmed-In-Part

IAN A. CALVERT Administrative Patent Judge	)	
JOHN P. McQUADE Administrative Patent Judge	)	BOARD OF PATENT APPEALS AND INTERFERENCES
JENNIFER D. BAHR Administrative Patent Judge	)	

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